

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for manufacturing a single-side mirror surface wafer, comprising:

~~a grinding step for grinding a top surface of a semiconductor after its having the top surface has~~ been lapped;

~~an etching step for etching the ground semiconductor wafer; and~~

~~a double side polishing step for mirror polishing said top~~ the top surface of the etched semiconductor wafer, while ~~at the same time~~ simultaneously polishing lightly a back surface of said ~~etched~~ the etched semiconductor wafer, wherein the top surface polishing of the semiconductor wafer is performed at a different speed than the back surface polishing of the semiconductor wafer, and wherein

~~said etching step comprises composite etching including an acid etching and an alkali etching which are performed in a predetermined sequence~~

the etching of the semiconductor wafer comprises a first acid etching using a first acid etching solution on the semiconductor wafer, then a second acid etching using a second acid etching solution on the semiconductor wafer, and then alkali etching the semiconductor wafer.

2. (Canceled)

3. (New) A method for manufacturing a single-side mirror surface wafer, comprising:

grinding a top surface of a semiconductor after the top surface has been lapped;

etching the ground semiconductor wafer;

mirror polishing the top surface of the etched semiconductor wafer, while simultaneously polishing lightly a back surface of the etched semiconductor wafer,

wherein the top surface polishing of the semiconductor wafer is performed at a different speed than the back surface polishing of the semiconductor wafer,

wherein the top surface polishing of the semiconductor wafer is performed at a different speed than the back surface polishing of the semiconductor wafer, and

wherein the etching of the semiconductor wafer comprises an alkali etching on the semiconductor wafer, then an acid etching on the semiconductor wafer; and

wherein an amount of the alkali etching relative to an amount of the acid etching is in a ratio of 3:2.

4. (New) A method for manufacturing a single-side mirror surface wafer, comprising:

grinding a top surface of a semiconductor after the top surface has been lapped;

etching the ground semiconductor wafer; and

mirror polishing the top surface of the etched semiconductor wafer, while

simultaneously polishing lightly a back surface of the etched semiconductor wafer,
wherein the top surface polishing of the semiconductor wafer is performed at a
different speed than the back surface polishing of the semiconductor wafer,

wherein the etching of the semiconductor wafer comprises a first acid etching
using a first acid etching solution on the semiconductor wafer, then alkali etching the
semiconductor wafer, and then a second acid etching using a second acid etching solution
on the semiconductor wafer.